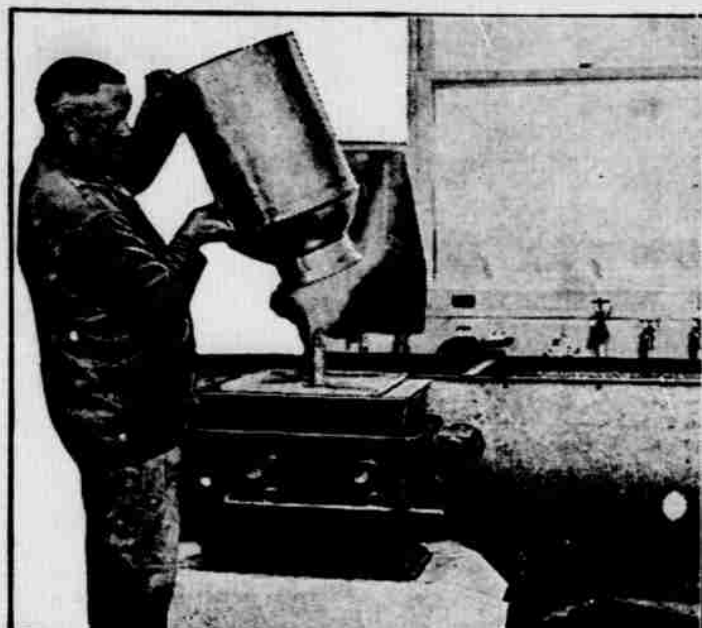


Helping the Meat and Milk Supply

(Special Information Service, U. S. Department of Agriculture.)
A STEAM GERM-KILLER FOR SMALL DAIRIES



Placing a Milk Can Over the Home-Made Sterilizer—It Can Be Used on the Kitchen Stove.

DEVICE INSURES CLEANSED MILK

Steam Destroys Disease Germs
and Injurious Bacteria.

SMALL OUTFIT EASILY MADE

Tests Show Five-Minute Treatment of
Dairy Utensils Is Sufficient—Two-
Burner Wickless Kerosene
Stove Is Useful.

Steam is the arch enemy of harmful bacteria that lurks in milk utensils. But steam isn't the common method of sterilizing used in small dairies, because it is not always available. In fact, lacking it, dairy utensils on small farms are not often sterilized satisfactorily, and as a result diseases hide in milk and may be carried to many families. Washing milk cans and utensils, at least by the processes ordinarily used, does not insure freedom from infection and contamination.

For \$10 or \$15 a simple steam sterilizer, which will serve a small dairy, can be made in a short time. At that price—which includes a small kerosene stove—this sterilizer should be practical in any dairy from which cream or milk is sold. And the additional keeping qualities which the sterilization of utensils will give milk and cream probably will pay for the cost of the sterilizer in one season. For when utensils are treated with steam all bacteria or disease germs which may be in them are destroyed, and therefore milk and cream when placed in these utensils will keep sweet much longer.

Directions for Making.
This is the way to make a small sterilizer. Specialists of the United States department of agriculture, who describe the process, say this sterilizer will be of greatest use to those who have one, two or three gallon or smaller cans, with a similar number of pails and a strainer cloth. It can be used, however, with a large number of cans. It is made of a roasting pan, a cover, a galvanized-iron box and a removable top to the box.

FOR \$10 TO \$15, SMALL DAIRIES CAN HAVE STEAM STERILIZER.

The cost of the steam sterilizer itself should not be more than \$8. If it is necessary to buy a small stove the cost will be \$4 or \$5 more. The materials used in it can be bought at prices about as follows: Roasting pan, 25 cents to \$1, depending on the grade of iron. The galvanized iron with asbestos and construction work should not cost more than \$7, and the work can be done by any tinner. A two-burner wickless kerosene stove costs from \$4 to \$5; but in many cases it will not be necessary to purchase a stove. The details of making the sterilizer and suggestions as to how it should be operated are described in Farmers' Bulletin 748 of the United States department of agriculture.

When properly operated this sterilizer destroys practically all the bacteria in the utensils, including all disease germs, which may be present. It will accomplish the same results as any sterilizer in which steam is under pressure is used. Experiments with it show that the five-minute steaming is, for all practical purposes, as good as the 15 to 20 minute steaming usually recommended.

The roasting-pan is of standard size, 20 inches long, 14 inches wide—top measurement—and 3 inches deep. The cover to this is close fitting and insulated. Upon this is placed the galvanized-iron box with its removable top. The insulated cover is made as follows:

Take a sheet of heavy galvanized iron and cut it large enough to allow it to project three-fourths inch over the edge of the pan. Bend the edges of the sheet so as to form a shallow box with sides three-eighths inch high. Then cut out a cover for the shallow box. Cut a hole one and one-half inch in diameter in the center, through the top and bottom, of the small box. Iron braces should be placed crosswise of the box to strengthen it. Then fill the shallow box completely with paper or asbestos sheets, after which the top is carefully soldered on, care being taken to make the seams absolutely tight. Solder a round, galvanized iron pipe, four and one-half inches long and one and one-half inch in diameter in the hole in the center of the cover. Solder flanges beneath cover so that they will meet the edge of the roasting pan, thus making a tight cover. On the top of the insulated cover solder strong folded galvanized-iron strips, three-eighths inch high, to form a square 15 inches by 15 inches, for holding the upper galvanized iron box. On top of the cover solder also four strips of stiff, galvanized-iron eight inches long and three-eighths inch wide. These strips should extend three-

PATRIOTISM AND GOOD MILK.

Every owner of a dairy herd should consider it his duty to himself and to the community to keep only healthy cows, supply them with wholesome feed and keep them in clean, comfortable quarters. There is not only patriotism in the service to his patrons which results from such management, but there is more profit.

The milkers and all who handle the milk should realize that they have in their charge a food which is easily contaminated and should, therefore, take all reasonable precautions to prevent the milk from becoming a source of danger to themselves and to others.

The consumer should understand that clean, safe milk is worth more and its production costs more than milk which contains dirt and disease germs; therefore he should be willing to pay more for it than for dirty milk, which is dear at any price.

eight inches above the cover and run from a distance of one inch from the corners to one inch from the steam outlet in the center.

The galvanized-iron box has no bottom but fits in the square formed by the four strips on the cover. The box is 11 inches high. Inside it, three-fourths inch from the top and one-half inch from one side, a stiff wire should be riveted and soldered. It is sometimes desirable to re-enforce the box at each corner with angle iron six inches long and one-half inch wide, riveted halfway up the side.

Kerosene Stove Used.
In the department of agriculture's tests of the outfit described a two-burner wickless kerosene stove was used with excellent results. The sterilizer, however, may be placed on the kitchen stove or over any other source of heat, such as a gas, gasoline, or laundry stove, which burns either wood or coal. Good results also are obtained at very little cost by building under the sterilizer a small brick furnace 12 inches high. It is necessary to have sufficient heat to furnish steam at the end of the outlet pipe at least 200 degrees Fahrenheit, and 220 to 231 degrees Fahrenheit should be obtained if possible.

The KITCHEN CABINET

She is a capitalist.
Even though she may in cottage dwell.
Whose heart to truth is close a kin
O, what indeed do paltry dollars spell,
Unless the life is right within!
—A. H. Ayers.

WAYS WITH GELATINE.

Most cooks labor under the mistaken idea that gelatine is only used as a light dessert, however there are countless ways of serving it. The following are a few:

Meat Loaf.—Soak one package of gelatine in a cupful of cold water five minutes, add the juices of a lemon. Add an onion grated, a stalk of celery chopped, to a pint of rich stock, chicken or other broth, strain and pour in the gelatine after the flav-

or has been cooked out of the vegetables. Put into a mold and when beginning to set add a pint of cooked meat finely chopped. When firm, slice and serve on a platter garnished with cream or parsley.

Soak a teaspoonful of gelatine in a small quantity of vinegar or lemon juice and add to a mayonnaise dressing to thicken it.

Lemon Jelly made from lemon juice, water and gelatine, cut in cubes makes a most delicate garnish for pressed chicken.

Grape Sherbet.—Soak half an envelope of gelatine in half a cupful of cold water five minutes. Make a syrup by boiling one cupful of sugar in one and a half cups of boiling water ten minutes then add the soaked gelatine. Cool slightly and add a pint of lemon juice and a third of a cupful of orange juice. Freeze. Serve in sherbet glasses.

Gelatine to be good should be absolutely tasteless and uniform in strength. A jelly should be just stiff enough to hold its shape when turned out of the mold, yet soft enough to quiver, with the movement of the dish.

Prune Jelly.—Wash a half pound of prunes, cover with water and soak several hours; then put them water and all into a saucepan with the grated rind of half a lemon and a cupful of sugar. Cook until tender, strain off the liquid and rub the prunes through a sieve. Crack a few of the stones, blanch the kernels and add them to the pulp. Add the gelatine, pulp and fruit juices and stir occasionally until nearly cold. Decorate with shredded almonds and set away until firm.

The union of lakes, the union of lands,
The union of states none can sever.
The union of hearts, the union of hands,
And the Flag of our Union forever!

PALATABLE DISHES.

The coarser stalks of celery may be used for cooked celery, making a most wholesome dish for a supper or for luncheon.

Boil three cupfuls of cut-up celery in a little salted water until tender, allowing it to steam nearly dry. Put it into a buttered baking dish in layers with a cupful and a half of rich white sauce, alternating until all is used. Cover with buttered crumbs and grated cheese, bake until the crumbs are brown.

Rich Oyster Stew.—Rub the inside of the stew pan with a cut clove of garlic and a slice of onion, do not allow a shred of either to remain. Melt three tablespoonfuls of butter, add one and a half tablespoonfuls of flour, stir and cook until smooth, then add one and a half cupfuls of thick cream, and one and three-fourths pint of milk. When it is boiling hot add the oysters which have been parboiled three minutes, boil up and serve at once with seasoning of salt and pepper to taste.

Stewed Beans With Vegetables.—Soak a cupful of beans over night and in the morning add a pinch of soda and scald them. Simmer for three hours in salted water. Add a fourth of a pound of sliced salt pork and boil for an hour longer. Then add two cupfuls of diced potatoes, two sliced onions, one cupful each of diced carrots and turnips. Cook until the vegetables are tender then add a half cupful of barley, which has been soaked and cooked until soft. Season to taste with salt and pepper and in the seasoning add a cupful of fresh corn cut from the cob.

Old-Fashioned Welsh Rarebit.—Slice a half pound of bacon and fry on one side, then turn them and lay on a slice of cheese to cover the bacon well. Sprinkle with paprika, cover the frying pan and cook gently until the turned side of the bacon is done. The cheese will then be melted and crisp at the edges. Serve with buttered toast at once.

Add a handful of dates and raisins with a few nuts to chopped apple, and celery, with French dressing, which makes a most delightful salad.

A most tasty way of serving boiled cabbage was discovered by adding a little of the vinegar in which dill pickles had been put up. Butter, salt and pepper were added, but the vinegar gave a new and most appetizing flavor.

The talent of success is nothing more than doing what you can, well, and doing whatever you do, without thought of fame.

SEASONABLE PUDDINGS.

The following group of puddings may prove helpful or suggestive:

California Pudding.—Cream a half cupful of butter substitute, with one cupful of brown sugar; add one cupful each of ground raw potato, carrot and apple; then a cupful of flour mixed with a teaspoonful of cinnamon, a half teaspoonful of cloves and a teaspoonful of soda mixed with the potato. Dredge a fourth of a cup of shredded citron and a cupful of raisins with flour, using two tablespoonfuls and mixing it with the rest. Pour into a mold and steam three hours. Serve with a hard sauce. A teaspoonful of baking powder sifted over the fruit just before it is added to the batter will keep it from sinking to the bottom of the mold. Flour should be used as usual, however.

Apple Cracker Pudding.—Crumble six large milk crackers into a pudding dish; pour over these enough cold water to soak them until soft. Pare three medium-sized apples, cut in halves, remove the core and put them on to stew with a little water for ten minutes. Pour a pint of milk over the soaked crackers, add two beaten eggs, stir in the apples and a half cupful of sugar. Flavor with a teaspoonful of lemon extract and a grating of nutmeg over the top of the pudding. Put a teaspoonful of butter in small bits over the top and bake in a slow oven until firm and brown. Serve hot.

Indian Pudding.—Soak a pint of milk and add to it gradually a half cupful of Indian meal, a half cupful of molasses, a teaspoonful of cinnamon and a cupful of chopped suet. Cook ten minutes, cool and add three eggs beaten light. Turn into a greased mold and boil five minutes. Serve with hard sauce. This pudding may be baked if a light coating of flour is sifted over the top a delicious brown crust will be formed in baking. A half cupful of raisins will be a great addition to this pudding.

Attend the end, and never stand in doubt.
Nothing's so hard but search will find it out.
—Herrick.

ECONOMICAL DISHES.

The tough ends of steak or bits of left-over may be used most acceptably in the following:

Chili Con Carne.—Cut up the left-over steak and put a layer of the meat in a casserole, sprinkle with chopped onion, a few spoonfuls of kidney beans and a layer of canned tomatoes, seasoning each layer with salt and chili pepper. Repeat until the casserole is filled, then turn in the liquid part of the tomatoes thickened with a little flour and butter, cover and bake an hour, then uncover and bake 20 minutes.

Mock Terrapin.—Parboil a pound of beef liver, cut in slices for five minutes, then drain and brown in bacon fat. Chop in small pieces put back into the pan and add a quarter of a teaspoonful of dry mustard, salt and pepper to taste, a few drops of Worcestershire sauce, and boiling water if needed. Boil up, thicken with flour blended with butter, using a tablespoonful of each. Add a hard-cooked egg, finely chopped, and a few drops of lemon juice.

Canned Corn on Toast.—To each cupful of corn add a teaspoonful of chopped onion fried in a tablespoonful of butter, do not brown; add the corn, a half cupful of milk, salt and pepper to taste. Cook slowly for five minutes. Meanwhile toast a slice of bread for each person and fry two slices of bacon for each. Pour the prepared corn over the toast from which the crusts have been removed. Serve with the bacon slices over the top.

Yorkshire Corn Pudding.—Put into a mixing bowl a cupful of canned corn, three-fourths of a cupful of milk, add two well-beaten egg yolks. Into another bowl sift a cupful of flour with three teaspoonfuls of baking powder and a half teaspoonful of salt, mix together the flour and corn, add the well-beaten whites of two eggs. Put into well-greased muffin rings and put into each a teaspoonful of the juice from the roast, fill half full with the batter and bake in a moderate oven. Serve around the meat with meat gravy.

Nellie Maxwell

Many Like Him.
"What's wrong with Githers?" "He has a mistaken conception of his duty as a citizen." "Yes?" "He won't put his shoulder to the wheel. He wants other people to do that, while he stands on one side and jots down the number of revolutions it makes."—*Birmingham Age-Herald.*

CHILDREN GREET AMERICAN MARINES IN FRANCE



Truckload of American marines on a road in France, greeted by the children with cheers and bouquets.

AMERICAN RED CROSS AMBULANCES AID ITALIANS



The American Red Cross ambulances that were sent to Italy to help the Italian forces have arrived at the front. This photograph, which has just arrived in this country, shows the ambulances crossing the Piazza del Duomo in Milan on their way to the battleground.

MISS BLANCHE GEARY



American women who journey to Paris during this war have now a hotel of their own where they can stop. The Y. W. C. A. has opened the Hotel Petrograd especially for their comfort and placed Miss Blanche Geary in charge as manager. Miss Geary is well fitted for the task, for she is the building construction expert of the Y. W. C. A. Before going abroad for the association she superintended the construction of the Y. W. C. A. houses at Plattsburg, Fort Worth, Tex.; Fort Riley and Army City, Kan.; Lawton, Okla., and Allentown, Pa.

Wildcats Stop Mining.
Three wildcats tied up operations at the mines of the Abel (Pa.) Coal company and incidentally cut down the production 200 tons.

The animals had been prowling about the mines for a week or more, and on one morning the heavy white frost on the ground showed the miners that the cats had gone into the mines.

There was no evidence of their having come out, and the miners assembled at the entrance and sent some of the men to get guns.

On account of the unusual conditions existing in the mines it was late before the last cat was killed. No coal was mined while the men were hunting the cats.

MAKING PICTURES UNDER SHELL FIRE



When you pick up one of the many publications which print war photographs and see startling pictures of actual fighting at the front, or when you see real battle scenes on the screen, very rarely do you think of the hazard the photographers run who make the photographs. This picture shows French photographic operators working near the front lines within the range of enemy fire. The smoke from an exploded shell can be seen. The men in the photographic division who make the photographs for war records and for the intelligence bureau are in as much danger as the men in the trenches.

THE GRIM HARVEST OF WAR



In the midst of the desolation of war in northern France lie a German transport driver and his team, killed by a single high explosive shell.